

S5 micron User Manual

Thank you for buying the S5 micron camera.

Entirely manufactured with CNC machinery, the S5 is a very innovative camera of the latest generation, with technical solutions that makes it unique in the field of high resolution digital photography.

All the controls are micrometric to ease the focusing on the reduced format of the digital sensor.

Some of the solutions are unique; especially in the use of short and extremely short focal lenses allowing tilt, swing and shift movements inconceivable until today. In fact the constructive solutions of the S5 allow the standards to be in very close contact, the use of soft or hybrid bellows and the recessed lens boards amplify this characteristic to a point which no other view camera can boast.

Although the S5 micron has been projected for digital photography, its performances show also in analogue photography in the basic 6x9 format where its precision and sturdiness reveal to be even overdimensioned.

Let's see what the S5 looks like when delivered to you:

- The S5 camera travels safely in its ABS case which in turn is placed inside a cardboard box.
- Inside the case the S5 micron, the camera body and standard bellow in the basic configuration, is protected by a moulded insert, the warranty and these instructions.



Camera Assembly :

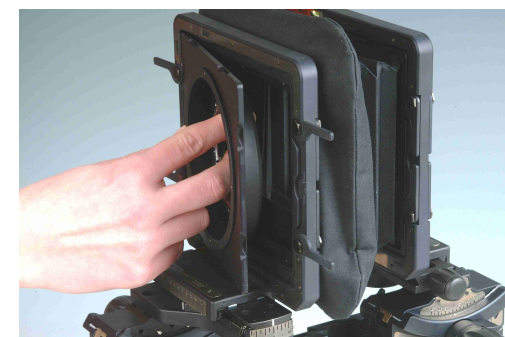
1) The camera assembly can be made laying the camera on a table (the base is large enough to ensure a good support), even if the use of an appropriate tripod is certainly suggestable. For this purpose the S5 has in its base the two classic fastener threads 1/4" and 1/8". Take care to screw in depth the screw inside the camera base before actioning the locking nut to avoid damages to the thread.



2) Now open the 4 levers (1) on the back standard and insert the bellow in its place, then close the levers until blocking the bellow; now open the 4 levers (1) on the front standard and repeat the same operation until the blocking of the bellow.



3) Mount the back plate with the standard Silvestri 4 points attachment in the back standard by using the 4 levers as explained at point 2, the plate has to be positioned with the two reference red dots one to the top and the other to the right. Sliding Back Adapters and format backs for analogue photography fit on this plate, aline the four red dots to find the position of insertion.



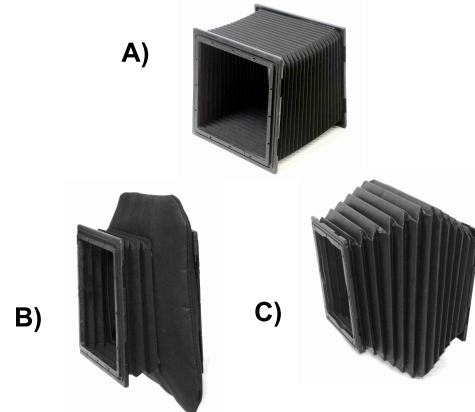
Accessories and their use:

Bellows

a) Standard; square and parallel, for medium-long focal length lenses.

b) Wide angle; for short and medium focal length lenses.

c) Biconic; for lenses of medium long focal length, for wide tilt and swing movements.



ATTENTION! when removing the bellow DO NOT pull the bellow's fabric but first push the metal frame from the inside out of its place in both standards.

Lens boards:

a) Lens board with n. 0 hole, for lenses in 0 shutter.

b) Lens board with silvestri bayonet, for lenses with Silvestri bayonet mounting.

c) Recessed lens board with n. 0 hole, for lenses in n.0 shutter

d) Recessed lens board with Silvestri bayonet, for lenses in Silvestri bayonet mounting.

The recessed lens board are needed for short focal lenses (f.i. 24/35/47/60mm Schneider, 35/45/55 Rodenstock).



Shutters Available:

Copal 0 & 1 : Mechanical shutter with manual loading, manual diaphragm setting, times from 1" to 1/500" + B and T poses.

Copal Press 0 & 1: Mechanical shutter with preselection of the diaphragm and automatic loadin, times from 1" to 1/125" + B pose.

Prontor/Silvestri n. 0 : Magnetic shutter with electronic control, it is activated by the Silvestri Remote Control Unit code 7053K. This type of shutter is needed for Multishot and Microstep digital backs. Selection of times from the remote control unit, selection of diaphragms from the shutter.

Schneider 0 shutter: Magnetic shutter with electronic control, it is activated by the Silvestri Remote Control Unit code 7053K: selection of times and diaphragms. Needed for Microstep and Multishot digital backs.

- Rollei Electronic shutter, times and diaphragms are activated by the Rollei remote control unit which also supplies cables and interfaces.

The S5 can use a wide range of lenses. These lenses mounted on bayonet rings are very compact and they allow a rapid and precise positioning.



The lenses in Silvestri bayonet are available with two different shutters: mechanical Copal (24) or Prontor Magnetic (23). This second version, suitable for multishot and microstep has to be controlled by our remote control unit (22).

Digital Lenses in Bayonet

| Schneider | Copal 0 | Prontor Magnetic | Schneider Electronic |
|----------------------|---------|---------------------|-------------------------|
| Apo Digitar 5,6/24XL | D7224 | 2250K | 2250KS |
| Digitar 2,8/28L | D7202 | 2329K | 2329KS |
| Apo Digitar 5,6/35XL | D7201 | 2240K | 2240KS |
| Apo Digitar 5,6/47XL | D7218 | 2248K | 2248KS |
| Apo Digitar 4/60N | D7206 | 2261K | 2261KS |
| Apo Digitar 5,6/72L | D7207 | 2273K | 2276KS |
| Apo Digitar 4/80N | D7208 | 2281K | 2281KS |
| Apo Digitar 4,5/90N | D7212 | 2291K | 2291KS |
| Apo Digitar 5,6/100N | D7214 | 2214K | 2214KS |
| Apo Digitar 5,6/120N | D7216 | 2212K | 2212KS |
| Apo Digitar 5,6/150N | D7225 | 2215K | 2215KS |
| Apo Digitar 5,6/180T | D7248 | 2284K | 2284KS |
| Apo Digitar 5,6/80M | D7210 | 2282K | 2282KS |
| Apo Digitar 5,6/120M | D7250 | 2213K | 2213KS |

| Rodenstock | Copal 0 | Prontor Magnetic |
|-------------------------------|---------|---------------------|
| HR Digaron S 5,6/23 | D7236 | 2323K |
| HR Digaron S 4,5/28mm | D7226 | 2234K |
| HR Digaron W 4,0/32mm | D8032 | 3232K |
| HR Digaron S 4/35mm | D7228 | 2236K |
| HR Digaron W 4,0/40mm | D7448 | 2346K |
| HR Digaron W 4,0/50mm | D7450 | 3250K |
| HR Digaron S 4/60mm | D7234 | 2266K |
| HR Digaron W 5,6/70mm | D7231 | 2278K |
| HR Digaron W 5,6/90mm | D7237 | 2295K |
| HR Digaron S 4/100mm | D7239 | 2268K |
| Apo Sironar Digital 4,5/45mm | D7230 | 2245K |
| Apo Sironar Digital 4,5/55mm | D7232 | 2255K |
| Apo Sironar Digital 5,6/70mm | D7233 | 2276K |
| Apo Sironar Digital 5,6/90mm | D7238 | 2293K |
| Apo Sironar Digital 5,6/105mm | D7240 | 2205K |
| Apo Sironar Digital 5,6/135mm | D7242 | 2217K |
| Apo Sironar Digital 5,6/150mm | D7244 | 2218K |
| Apo Makro Digital 5,6/120mm | D7246 | 2221K |



table 2

Working apertures, image angles, image circles and movement ranges

Rodenstock HR Digaron

| Lens | Image scale | Recom. working f-stop | Image angle | Image circle diameter | Movement range [mm] vertical / horizontal | | | | | |
|--------------|----------------|-----------------------------|----------------|--------------------------|---|-------------|-------------|-------------|-------------|-------------|
| | | | | | 24x36 mm | 37x37 mm | 33x44 mm | 37x49 mm | 36x56 mm | 40x54 mm |
| 40 mm f/4 | 1: ∞ | 5,6-8 | 94° | 90mm | 29 / 25 | 29 / 25 | 29 / 25 | 29 / 25 | 29 / 25 | 29 / 25 |
| 50 mm f/4 | 1: ∞ | 5,6-8 | 84° | 90mm | 29 / 25 | 29 / 25 | 29 / 25 | 29 / 25 | 29 / 25 | 29 / 25 |
| 70 mm f/5,6 | 1: ∞ | 5,6-8 | 70° | 100mm | 35 / 31 | 35 / 31 | 35 / 31 | 35 / 31 | 35 / 31 | 35 / 31 |
| 90 mm f/5,6 | 1: ∞ | 5,6-11 | 70° | 125mm | 48 / 43 | 48 / 43 | 48 / 43 | 48 / 43 | 48 / 43 | 48 / 43 |
| 23 mm f/5,6 | 1: ∞ | 5,6-8 | 112° | 70mm | 18 / 15 | 11 / 11 | 11 / 9 | 7 / 5 | 3 / 2 | 2 / 2 |
| 28 mm f/4,5 | 1: ∞ | 5,6-8 | 101° | 70mm | 18 / 15 | 11 / 11 | 11 / 9 | 7 / 5 | 3 / 2 | 2 / 2 |
| 35 mm f/4 | 1: ∞ | 5,6 | 90° | 70mm | 18 / 15 | 11 / 11 | 11 / 9 | 7 / 5 | 3 / 2 | 2 / 2 |
| 60 mm f/4 | 1: ∞ | 5,6 | 60° | 70mm | 18 / 15 | 11 / 11 | 11 / 9 | 7 / 5 | 3 / 2 | 2 / 2 |
| 100 mm f/4 | 1: ∞ | 5,6 | 39° | 70mm | 18 / 15 | 11 / 11 | 11 / 9 | 7 / 5 | 3 / 2 | 2 / 2 |
| 180 mm f/5,6 | 1: ∞ | 5,6-8 | 25° | 80mm | 24 / 20 | 17 / 17 | 17 / 14 | 13 / 11 | 11 / 8 | 9 / 8 |

Rodenstock Apo Sironar digital / Apo-Macro-Sironar digital

| | | | | | | | | | | |
|--------------|-----------|------|---------|-------|---------|---------|---------|---------|---------|---------|
| 35 mm f/4,5 | 1: ∞ | 8-11 | 111° | 105mm | 28 / 25 | 26 / 21 | 25 / 22 | 21 / 18 | | |
| 45 mm f/4,5 | 1: ∞ | 8-11 | 107° | 125mm | 39 / 35 | 38 / 32 | 36 / 32 | 32 / 29 | 8 / 7 | 4 / 3 |
| 55 mm f/4,5 | 1: ∞ | 8-11 | 95° | 125mm | 39 / 35 | 38 / 32 | 36 / 32 | 32 / 29 | 8 / 7 | 4 / 3 |
| 105 mm f/5,6 | 1: ∞ | 8-11 | 62° | 125mm | 39 / 35 | 38 / 32 | 36 / 32 | 32 / 29 | 8 / 7 | 4 / 3 |
| 135 mm f/5,6 | 1: ∞ | 8-11 | 58° | 150mm | 53 / 48 | 52 / 45 | 50 / 45 | 46 / 42 | 25 / 22 | 21 / 18 |
| 150 mm f/5,6 | 1: ∞ | 8-11 | 53° | 150mm | 53 / 48 | 52 / 45 | 50 / 45 | 46 / 42 | 25 / 22 | 21 / 18 |
| 180 mm f/5,6 | 1: ∞ | 8-11 | 45° | 150mm | 53 / 48 | 52 / 45 | 50 / 45 | 46 / 42 | 25 / 22 | 21 / 18 |
| 120 mm f/5,6 | 1:5 - 2:1 | 8-11 | 55°-24° | 150mm | 53 / 48 | 52 / 45 | 50 / 45 | 46 / 42 | 25 / 22 | 21 / 18 |

Schneider Apo Digitar

| Lens | center filter | Recom. working f-stop | Image angle | Image circle diameter | Movement range [mm] vertical / horizontal | | | | | |
|-----------|------------------|-----------------------------|----------------|--------------------------|---|-------------|-------------|-------------|-------------|-------------|
| | | | | | 24x36 mm | 31x31 mm | 37x37 mm | 36x48 mm | 37x49 mm | 63x63 mm |
| 5,6/24 XL | II d | 5,6-11 | 100° | 60mm | 12 / 9,5 | 10 / 10 | 5,1 / 5,1 | 0 / 0 | | |
| 2,8/28 L | | 2,8-11 | 92° | 60mm | 12 / 9,5 | 10 / 10 | 5,1 / 5,1 | 0 / 0 | | |
| 5,6/35 XL | II f | 5,6-11 | 88° | 70mm | 29 / 25 | 27 / 27 | 23 / 23 | 20 / 17 | 19 / 17 | 0,6 / 0,6 |
| 5,6/47 XL | II | 8-11 | 92° | 98mm | 42 / 37 | 39 / 39 | 35 / 35 | 33 / 30 | 32 / 29 | 15 / 15 |
| 4,0/60 N | | 4-11 | 53° | 60mm | 12 / 9,5 | 10 / 10 | 5,1 / 5,1 | 0 / 0 | | |
| 5,6/72 L | | 5,6-11 | 62° | 90mm | 29 / 25 | 27 / 27 | 23 / 23 | 20 / 17 | 19 / 17 | 0,6 / 0,6 |
| 4,0/80 L | | 5,6-11 | 53° | 80mm | 29 / 25 | 27 / 27 | 23 / 23 | 20 / 17 | 19 / 17 | 0,6 / 0,6 |
| 4,5/90 N | | 4,5-11 | 53° | 90mm | 29 / 25 | 27 / 27 | 23 / 23 | 20 / 17 | 19 / 17 | 0,6 / 0,6 |
| 5,6/100 N | | 5,6-11 | 53° | 100mm | 35 / 31 | 32 / 32 | 28 / 28 | 26 / 23 | 25 / 22 | 7,3 / 7,3 |
| 5,6/120 N | | 5,6-11 | 48° | 110mm | 40 / 36 | 37 / 37 | 33 / 33 | 31 / 28 | 31 / 27 | 14 / 14 |
| 5,6/150 N | | 5,6-11 | 40° | 110mm | 40 / 36 | 37 / 37 | 33 / 33 | 31 / 28 | 31 / 27 | 14 / 14 |
| 5,6/180 T | | 5,6-11 | 37° | 120mm | 45 / 41 | 42 / 42 | 39 / 39 | 37 / 33 | 36 / 33 | 20 / 20 |

Schneider Macro Apo Digital

| Lens | scale | Recom. working f-stop | Image angle | Image circle diameter | Movement range [mm] vertical / horizontal | | | | | |
|---------------------------|-------|-----------------------------|----------------|--------------------------|---|-------------|-------------|-------------|-------------|-------------|
| | | | | | 24x36 mm | 31x31 mm | 37x37 mm | 36x48 mm | 37x49 mm | 63x63 mm |
| Apo digital 5.6/80M | 1:4 | 5.6-11 | | | 21 / 18 | 19 / 19 | 14 / 14 | 11 / 8.9 | 9.9 / 8.1 | |
| At scales exceeding 1:1 | 1:2 | 5.6-11 | | | 24 / 20 | 22 / 22 | 17 / 17 | 14 / 12 | 13 / 11 | |
| the lens should not be | 1:1 | 5.6-8 | 28° | 80mm | 24 / 20 | 22 / 22 | 17 / 17 | 14 / 12 | 13 / 11 | |
| stopped down because | 2:1 | 5.6 | 18.6° | 80mm | 24 / 20 | 22 / 22 | 17 / 17 | 14 / 12 | 13 / 11 | |
| of increasing diffraction | 4:1 | 5.6 | 12.6° | 90mm | 29 / 25 | 27 / 27 | 23 / 23 | 20 / 17 | 19 / 17 | 0.6 / 0.6 |
| Apo Digital 5.6/120 M | 1:4 | 5.6-11 | | | 24 / 20 | 22 / 22 | 17 / 17 | 14 / 12 | 13 / 11 | |
| At scales exceeding 1:1 | 1:2 | 5.6-11 | | | 29 / 25 | 27 / 27 | 23 / 23 | 20 / 17 | 19 / 17 | 0.6 / 0.6 |
| the lens should not be | 1:1 | 5.6-8 | 26° | 110mm | 40 / 36 | 37 / 37 | 33 / 33 | 31 / 28 | 31 / 27 | 14 / 14 |
| stopped down because | 2:1 | 5.6 | 17.4° | 110mm | 40 / 36 | 37 / 37 | 33 / 33 | 31 / 28 | 31 / 27 | 14 / 14 |
| of increasing diffraction | 4:1 | 5.6 | 10.5° | 110mm | 40 / 36 | 37 / 37 | 33 / 33 | 31 / 28 | 31 / 27 | 14 / 14 |

Adapter back plate for S5 micron camera

This plate has a Silvestri 4 points attachment with engagement in 8° of rotation on which the above mentioned back adapters can be mounted. Moreover all accessories produced in the past for the Silvestri standard attachment can continue to be used on this camera.



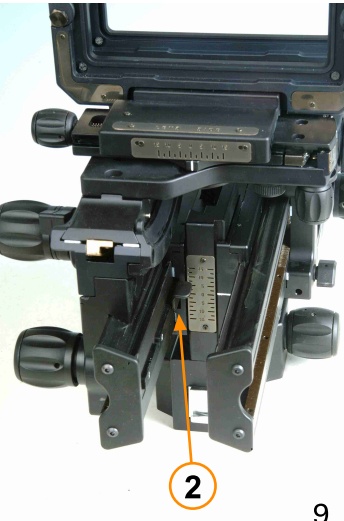
Adapter backs

- Standard 6x9 back with Graflex attachment, for 120 and 220 roll film holders.
- Stitching Sliding back adapter for one or two shots with drop-in plate. (see the specific User manual).
- Live video adapters



Focusing and fast extensioning of the rails:

S5 micron have two separate knobs for focusing, one activate the front group, the other activate the rear group; both of them have a micrometric movement and the locking system. The utility of the two independent focusing systems becomes evident when working in close-up still life photography, where the use of frontal adjustment produces enlargment variation and the rear one the focusing adjustment. The fast extensioning of the rails is made by pushing the unlock button (2); on the front or back side depending on the side you want to extend. The system has various determined auto - locking positions.



How to mount components on the standards:

By mean of the 4 levers placed on each side of the standards, it is possible to simply interchange the various components of the S5 micron camera. Open the levers, insert the lens board and close the levers; the lens board is locked in place. The system is substantially the same for the three main components: Backs, Lenses and Bellows.



Precautions in the mounting and the handling:

a) Lenses; when mounting them in the camera body, extend the view camera to avoid the lens rear element from hitting against the back.

As a general precaution, keep the lenses well protected with their caps, to avoid scratches and abrasions on the lenses and at the same time to keep them clean and perfectly working. The dry dust must be removed by brushes or sprays specific for this purpose and free of greasy components. The greasiness of hands degrade the image and they must be removed completely with appropriate products. Moreover the lenses must not suffer impacts, falls or anything else could cause damages to the mechanical elements. Do not dismantle the lens, as they often include small shims inserted by the manufacturer that could go lost.

b) Sliding adapters; These components fit the standard Silvestri 4 points attachments by a 8° clockwise movement, the red dots indicate the entering position. During the manipulation and mounting avoid touching the focusing screen and the fresnel lens, these elements are particularly delicate and can be easily damaged; when cleaning them, do not use strong solvent substances like alcohol, diluent, acetone, etc. but specific products.

These precautions must also be taken for every part containing lenses and mirrors or other similar elements. Do not keep the camera and its accessories in damp rooms or in high heat. this could cause damages and a fast degrade in the general functions of the equipment.

A



- 3 - Rise movement
- 4 - Side shift
- 5 - Rotation on the vertical axis
- 5a - Rotation lock
- 6 - Rotation on the horizontal axis
- 7 - Focus adjustment on the front body and on the rear body
- 8 - Locking system for the focus adjustment
- 9 - Unlock button for fast extension of the rails

Technical information

- Direct rise; 30mm upwards - 30mm downwards in total (front + rear). (3)
- Total side shift; 30mm to the right + 30mm to the left (front + rear). (4)
- Swing and Tilt movements:
- Rotation on the vertical axis: more than 15° right plus 15° left in each group. (5)
- Rotation on the horizontal axis: more than 15° plus more than 15° on each group. (6)
- Minimum distance between the standards = 0 mm (7)
- Maximum distance between the standards = 200mm (7)
- Lens fitting: Silvestri/S5 lens board, Silvestri bayonet.
- Back fitting system: Silvestri/S5 board, board with standard 4 points rapid attachment.
- Dimension height 330mm , Large 210mm , Depth 210 (Compact)
- Weight Kg. 4